

1. A new user-friendly reminder device retrofitted inside a conventional bottle cap to convert conventional bottle into a reminder bottle, for helping user to remember to take the content(s) stored inside the said bottle container regularly, comprising of:

- a. A battery supplies the power to the said reminder device,
- b. A sensor that automatically senses and detects the closing or opening of the said conventional bottle cap to activate or deactivate a timer,
- c. The said timer is activated at a predetermined time interval when said sensor detects said conventional bottle cap has been closed on the said conventional bottle container,
- d. Alert means generate audible, visual, vibration and wireless radio frequency (RF) signals when said timer is timed-out to alert users to open said conventional bottle cap, take or eat the said content(s), and deactivate the said timer automatically, and
- e. Attachment means to hold the said reminder device onto the inside of the said conventional bottle cap,

Whereby the said convention bottle is converted into the said reminder bottle.

2. The said reminder device of claim 1, wherein said conventional bottle cap is a standard, regular, typical, childproof or non-childproof, off-the-shelf and over-the-counter at homes, offices or stores for food, pill or non-food storage bottle cap.

3. The said content(s) inside the said conventional bottle of claim 1 are regularly prescribed or non-prescribed medications, drink, food, food supplements, vitamin pills and/or any edible or non-edible products.
4. The said user-friendly reminder device of claim 1, is that its simplicity of use; There is no need for users to learn setup, operate and use of the said reminder device.
5. The said reminder device of claim 1, wherein said retrofitted is a method of adding and attaching said reminder device, as an aftermarket kit, to said conventional bottle cap without physically altering, changing or modifying the said conventional bottle cap and said conventional bottle container.
6. The said reminder device of claim 1, wherein said sensor contains a pressure sensitive push-button switch and detects pressures from the inside of said conventional bottle cap against the rim of the bottle container to determine whether said conventional bottle cap is closed or opened.
7. The said reminder device of claim 1, wherein said timer contains digital electronic integrated circuits.
8. The said reminder device of claim 1, wherein said reminder device contains non-toxic materials or is hermetically sealed to protect from the said reminder device contaminating the said contents inside the said conventional bottle and vice versa.
9. The said reminder device of claim 1, wherein said alert means generate audible alerts such as beeping, melodies, music and pre-recorded voice sound signals.
10. The said reminder device of claim 1, wherein said wireless radio frequency signal is generated by a radio frequency (RF) transmitter sending said alert means signal

wirelessly to receivers, outside of the said reminder bottle, for generating external alerts and remote monitoring purposes.

11. The said reminder device of claim 1, wherein said visual alerts contain lights with light emitting diodes (LED) generate blinking, on/off flashing visual light signals shining through the said conventional bottle cap and the conventional bottle container to alert the user.
12. The said reminder device of claim 1, wherein said power supply circuit contains a battery low indicator to inform the user to change the battery or renew the said reminder device completely.

ABSTRACT

This present invention is for new user-friendly electronic reminder devices that convert regular conventional bottles into reminder bottles. The reminder device is compatible and can be retrofitted inside a regular conventional bottle cap. This reminder device is installed inside the conventional bottle between the bottle cap and the bottle container. When the user closes the bottle cap on the bottle container, the electronic timer, with predetermined time interval, is automatically activated. That activated timer will generate alert signals to remind the user to take his/hers next dose at time-out. The reminder device and alert signals are automatically deactivated and reset when the user opens the bottle cap (to take contents from the bottle container). This present reminder device works with both conventional safety (childproof) and non-safety bottle caps.